

USSN: 09/439,429
Attorney Docket No: 3045.00004

AMENDED VERSION

IN THE CLAIMS:

Claims 1-2 (cancelled)

1. (Currently Amended) A pharmaceutical or medical composition comprising as active ingredient at least one synthetic nuclease resistant antisense oligodeoxynucleotide having a nucleotide sequence selected from the group consisting of SEQ. ID No. 4 and SEQ. ID No. 6 in a physiologically acceptable carrier or diluent for delivery in vitro.

2. (Previously Presented) The pharmaceutical composition of a synthetic nuclease resistant antisense oligodeoxynucleotide comprising either SEQ. ID No. 4 or SEQ. ID No. 6 and at least one other non-control AS-ODN selected from Tables 1 and 2 wherein a percent inhibition is greater than 25%.

Claims 5-6 (cancelled)

3. (Presently Amended) A pharmaceutical composition for selectively inhibiting mammalian tumor necrosis factor alpha in a mammal in need of such treatment in vitro consisting of:

an effective amount of at least one active ingredient a synthetic nuclease resistant antisense oligodeoxynucleotide having a nucleotide sequence selected from the group consisting of SEQ. ID No. 4 and SEQ. ID No. 6 in a pharmaceutically physiologically acceptable carrier or diluent.

4. (Presently Amended) A pharmaceutical or medical composition comprising as active ingredient at least one synthetic nuclease resistant antisense oligodeoxynucleotides as set forth in claim 6 for selectively inhibiting human tumor necrosis factor-alpha in vitro, said antisense oligonucleotide comprising an exon targeting sequence flanking donor splice sites thereby regulating expression of TNF- α wherein the nucleotide sequence is selected from the group consisting of SEQ ID No. 4 and SEQ ID No. 6 in a physiologically acceptable carrier or diluent.

Claim 9 (cancelled)

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10. (Presently Amended) A method inhibiting expression of human tumor necrosis factor alpha in a mammal by administering a pharmaceutical composition as set forth in claim 57.

11. (Presently Amended) A DNA expression sequence comprising a transcriptional initiation region and a sequence encoding an oligonucleotide as set forth in claim 57.

12. (Original) A vector comprising a DNA sequence according to claim 11.

13. (Previously Presented) A method of selectively regulating mammalian tumor necrosis factor alpha by targeting for treatment a tumor necrosis factor alpha splice region and then specifically modify the region to inhibit the mammalian tumor necrosis factor alpha.

14. (Previously Presented) The method of claim 13 further including administering an effective amount of a synthetic nuclease resistant antisense oligodeoxynucleotide which targets exon sequences flanking donor splice sites.

15. (Previously Presented) A method of inhibiting tumor necrosis factor alpha by targeting for treatment a tumor necrosis factor alpha splice region thereby inhibiting tumor necrosis factor alpha.

16. (Previously Presented) The method of claim 15 further including administering an effective amount of a synthetic nuclease resistant antisense oligodeoxynucleotide which targets exon sequences flanking donor splice sites.